REMARKS/DISCUSSION OF ISSUES

By this Amendment, Applicant amends claims 1, 2, 6, 17, 18 and 22. Accordingly, claims 1-25 are pending in the application.

The Examiner is respectfully requested to state whether the drawings are acceptable.

Claims are amended 1, 2, 6, 17, 18 and 22 to correct certain typographical errors, and in some cases for increased clarity. The claims are not narrowed in scope and no new matter is added.

Reexamination and reconsideration are respectfully requested in view of the following remarks.

35 U.S.C. § 112

The Office Action rejected claims 1, 6, 17, and 22 (and any depending claims) under 35 U.S.C. § 112 due to some minor typographical errors.

By this amendment, Applicant corrects those typographical errors, and respectfully submits that the claims as amended all fully satisfy the requirements of under 35 U.S.C. § 112.

Accordingly, withdrawal of the rejections of claims 1, 6, 17, and 22 (and any depending claims) under 35 U.S.C. § 112 is respectfully requested.

35 U.S.C. § 103

The Office Action rejected claims 1-25 under 35 U.S.C. § 103 over Gilhousen et al. U.S. Patent 6,421,540 ("Gilhousen") in view of Butler et al. U.S. Patent 6,748,010 ("Butler").

Applicant respectfully traverses those rejections for at least the following reasons.

Claim 1

Among other things, the method of claim 1 includes determining if the strength of a first pilot signal is smaller than a first threshold value, determining if the strength of the first pilot signal is larger than a second threshold value, determining if the

strength of a second pilot signal is smaller than the first threshold value, and determining if the strength of the second pilot signal is larger than the second threshold value, where the first and second pilot signals reside in the pilot channel and are associated with the first and second page indicators, respectively, and where the first threshold value is larger than the second threshold value.

The Office Action fairly admits that Gilhousen does not disclose such a combination of features, particularly any seconds threshold, but states that Butler discloses a second threshold and that the combination of Gilhousen and Butler would include all of these features.

Applicant respectfully traverses the proposed combination of Gilhousen and Butler as lacking any motivation in the prior art, and also respectfully submits that no combination of Gilhousen and Butler could produce a method including such a combination of features.

The Office Action states that it would have been obvious to one or ordinary skill in the art at the time of this application to combine the supposed teaching of Butler into the system of Gilhousen "for the advantage of providing a paging system less resistant to channel noise and fading."

M.P.E.P. § 2143.01 states that "obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art."

Here, the Office Action provides no citation to anything in the prior art that would provide such a motivation. Certainly Butler itself does not suggest such a motivation - indeed Butler and does not even make any mention of channel noise at all! Instead, the Office Action provides nothing but an unsupported, conclusory statement that "it would have been obvious" to make the proposed combination "for the advantage of providing a paging system less resistant to channel noise and fading."

Applicant respectfully submits that, as a matter of law, such unsupported statements cannot support a rejection under 35 U.S.C. § 103. A rejection under 35 U.S.C. § 103 must be based on objective evidence of record, and cannot be supported merely on subjective belief and unknown authority. "The examiner can satisfy the burden of showing obviousness of the combination only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead the individual to combine the relevant teachings of the references." In re Lee 61 U.S.P.Q.2d 1430, 1434 (2002) (emphasis added).

No such citation to any teaching, suggestion, or motivation in the prior art has been provided by the Office Action here, nor did the Examiner submit an affidavit as required by 37 CFR 1.104(d)(2) if this proposed motive were based on facts within his personal knowledge (see MPEP § 2144.03). Applicant requests such an affidavit if this rejection continues to be maintained based a motive for combination not explicitly suggested in the prior art.

Therefore, Applicant respectfully submits that the Office Action fails to satisfy the burden under the law of providing any proper motivation for the proposed combination of references. Accordingly, Applicant respectfully submits that the proposed combination is improper, and therefore traverses the rejection based on the proposed combination.

Furthermore, Applicant respectfully submits that no combination of Gilhousen and Butler could produce a method including the above-recited combination of features found in the method of claim 1.

At the outset, the Office Action states that Butler discloses the first and second page bits are each associated with a set of samples from the pilot channel. However, Applicant respectfully submits that set of digital samples of a pilot channel produced in a receiver is not the same as actually transmitted first and second pilot signals. Second, Butler does not disclose that any first and second pilot signals are associated (respectively) with first and second page indicators. Instead, Butler searches in a plurality of stored samples for a pilot signal that may originate from different base stations or may be received at different times due to multipath

propagation.

Furthermore, Butler does not teach the comparison of the strength of **any** pilot signal with two thresholds (first and second thresholds) as recited in claim 1. So, Butler cannot disclose or suggest the recited second threshold (which is less than the first threshold), and cannot make up for Gilhousen's deficiency in that regard. Indeed, neither Gilhousen nor Butler discloses or suggests comparing of the strength of **any** pilot signal with first and second thresholds, where the first threshold is larger than the second threshold, as recited in claim 1.

Therefore, no possible combination of Gilhousen and Butler could produce the method of claim 1.

Finally, Applicant specifically traverses the statement at page 4, lines 1-9 of the Office Action that speculates – without any support or citation whatsoever - as to what would be produced if one somehow and for some reason attempted to modify Gilhousen based on the supposed-teachings of Butler. Applicant respectfully submits that there is absolutely no support for this speculation, which appears to be little more than a hindsight reconstruction of Applicant's claims.

Accordingly, for at least these reasons, Applicant respectfully submits that claim 1 is patentable over the cited art.

Claims 2-5

Claims 2-5 depend from claim 1 and are deemed patentable for at least the reasons set forth above with respect to claim 1 (including specifically the traversal of the proposed combination of Gilhousen and Butler), and for the following additional reasons.

Claim 2

Among other things, the method of claim 2 includes decoding the subsequent paging channel slot, if the strength of the first pilot signal is smaller than the first threshold value, and if the strength of the second pilot signal is not larger than the second threshold value.

Applicant respectfully submits that neither Gilhousen nor Butler, nor any combination thereof would include such a feature.

The Office Action states that claim 2 is rejected for the same reasons as claim 6. Meanwhile, the Office Action states with respect to claim 6 that Butler discloses that "if neither signal is received with sufficient quality (Butler's step would only occur after the first pilot signal was measured to be under the first threshold), then the system will decode the subsequent paging slot."

Applicant respectfully disagrees with this statement, and in any event respectfully submits that this is not what is specifically recited in claim 2.

First, the Office Action provides no citation for the statement that "Butler's step would only occur after the first pilot signal was measured to be under the first threshold," and Applicant respectfully traverses this statement, as Butler does not disclose comparing two different pilot signals to two different thresholds.

Meanwhile, the cited text in Butler at col. 4, at lines 45-57 discusses examining combined demodulation data to determine if a positive quick page has been received, and states that if the quick paging channel was not received with sufficient quality, then it checks for a full-page message. It does not mention either of the following features of claim 2: (1) comparing the strengths of both a first and a second pilot signal to two different thresholds (first and second threshold respectively); or (2) decoding the subsequent paging channel slot if the strength of the first pilot signal is smaller than the first threshold value, and if the strength of the second pilot signal is not larger than the second threshold value.

Therefore, Applicant respectfully submits that no possible combination of Gilhousen and Butler could produce a method that includes decoding the subsequent paging channel slot, if the strength of the first pilot signal is smaller than the first threshold value, and if the strength of the second pilot signal is not larger than the second threshold value.

Accordingly, for at least these additional reasons, Applicant respectfully submits that claim 2 is patentable over the cited art.

Claim 4

Among other things, in the method of claim 4 the first and second page indicators are optimized using a computer simulation.

The Office Action states that it would have been obvious to one of skill in the art at the time of the application that software simulations **could** be run, for the purpose of testing and optimizing all parameters of the system to increase product quality.

Applicant respectfully traverses this proposed modification of Butler as being improper and lacking any motivation in the prior art.

At the outset, M.P.E.P. § 2143.01 provides that "[t]he mere fact that references **can be combined** or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. In re Mills, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990) (emphasis added). Furthermore, FACT THAT THE CLAIMED INVENTION IS WITHIN THE CAPABILITIES OF ONE OF ORDINARY SKILL IN THE ART IS NOT SUFFICIENT BY ITSELF TO ESTABLISH PRIMA FACIE OBVIOUSNESS (emphasis in original). Instead, "Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art."

So, even assuming *arguendo* that "it would have been obvious to one of skill in the art at the time of the application that software simulations **could** be run," this would fail satisfy the requirements of 35 U.S.C. § 103.

Meanwhile, no citation to any teaching, suggestion, or motivation in the prior art has been provided by the Office Action here, nor did the Examiner submit an affidavit as required by 37 CFR 1.104(d)(2) if this proposed motive were based on facts within his personal knowledge (see MPEP § 2144.03). Applicant requests such an affidavit if this rejection continues to be maintained based a motive for combination not explicitly suggested in the prior art.

Accordingly, for at least these additional reasons, Applicant respectfully submits that claim 4 is patentable over the cited art.

Claim 6

Among other things, the method of claim 6 includes determining if the strength of a first pilot signal is smaller than a first threshold value, determining if the strength of the first pilot signal is larger than a second threshold value, determining if the strength of a second pilot signal is smaller than the first threshold value, and determining if the strength of the second pilot signal is larger than the second threshold value, where the first and second pilot signals reside in the pilot channel and are associated with the first and second page indicators, respectively, and where the first threshold value is larger than the second threshold value.

As explained above with respect to claim 1, Applicant respectfully submits that no combination of Gilhousen and Butler could produce a method including such a combination of features. Again, Applicant specifically traverses the proposed combination of Gilhousen and Butler.

Also among other things, the method of claim 6 includes decoding the subsequent paging channel slot, if the strength of the first pilot signal is smaller than the first threshold value, and if the strength of the second pilot signal is not larger than the second threshold value.

As explained above with respect to claim 2, Applicant respectfully submits that neither Gilhousen nor Butler, nor any combination thereof would include such a feature.

Accordingly, for at least these reasons, Applicant respectfully submits that claim 6 is patentable over the prior art.

Claims 7-9

Claims 7-9 depend from claim 6 and are deemed patentable for at least the reasons set forth above with respect to claim 6 (including specifically the traversal of the proposed combination of Gilhousen and Butler), and for the following additional reasons.

Claim 8

Among other things, in the method of claim 8 the first and second page indicators are optimized using a computer simulation.

As explained above with respect to claim 4, Applicant respectfully submits that neither Gilhousen nor Butler, nor any combination thereof would include such a feature.

Accordingly, for at least these additional reasons, Applicant respectfully submits that claim 8 is patentable over the cited art.

Claim 10

Among other things, the system of claim 10 includes one or more processors implemented in the at least one mobile station for comparing the pilot strength for the first page indicator with first and second threshold values, for comparing the pilot strength for the second page indicator with the first and the second threshold values.

For similar reasons to those set forth above with respect to claim 1, Applicant respectfully traverses the proposed combination of Gilhousen and Butler and respectfully submits that no combination of Gilhousen and Butler could produce a system including such a combination of features, particularly comparing a pilot signal strength to two different threshold values. Again, Applicant specifically traverses the proposed combination of Gilhousen and Butler.

Accordingly, for at least these reasons, Applicant respectfully submits that claim 10 is patentable over the prior art.

Claims 11-15

Claims 11-15 depend from claim 10 and are deemed patentable for at least the reasons set forth above with respect to claim 10 (including specifically the traversal of the proposed combination of Gilhousen and Butler), and for the following additional reasons.

Claim 12

Among other things, in the system of claim 12 the first and second page indicators are optimized using a computer simulation.

As explained above with respect to claim 4, Applicant respectfully submits that neither Gilhousen nor Butler, nor any combination thereof would include such a feature.

Accordingly, for at least these additional reasons, Applicant respectfully

submits that claim 12 is patentable over the cited art.

Claim 16

Among other things, the method of claim 16 includes comparing the pilot strength for the first page indicator with first and second threshold values, and comparing the pilot strength for the second page indicator with the first and the second threshold values.

For similar reasons to those set forth above with respect to claim 1, Applicant respectfully traverses the proposed combination of Gilhousen and Butler and respectfully submits that no combination of Gilhousen and Butler could produce a system including such a combination of features, particularly comparing any pilot signal strength to two different threshold values. Again, Applicant specifically traverses the proposed combination of Gilhousen and Butler.

Accordingly, for at least these reasons, Applicant respectfully submits that claim 16 is patentable over the prior art.

Claim 17

Among other things, the system of claim 17 includes processor means for determining if the strength of a first pilot signal is smaller than a first threshold value, processor means for determining if the strength of the first pilot signal is larger than a second threshold value, processor means for determining if the strength of a second pilot signal is smaller than the first threshold value, and processor means for determining if the strength of the second pilot signal is larger than the second threshold value, where the first and second pilot signals reside in the pilot channel and are associated with the first and second page indicators, respectively, and where the first threshold value is larger than the second threshold value.

For similar reasons to those set forth above with respect to claim 1, Applicant respectfully traverses the proposed combination of Gilhousen and Butler and respectfully submits that no combination of Gilhousen and Butler could produce a system including such a combination of features. Again, Applicant specifically traverses the proposed combination of Gilhousen and Butler.

Accordingly, for at least these reasons, Applicant respectfully submits that

claim 17 is patentable over the prior art.

Claims 18-21

Claims 18-21 depend from claim 17 and are deemed patentable for at least the reasons set forth above with respect to claim 17 (including specifically the traversal of the proposed combination of Gilhousen and Butler), and for the following additional reasons.

Claim 19

Among other things, the system of claim 19 includes processor means for decoding the subsequent paging channel slot, if the strength of the first pilot signal is smaller than the first threshold value, and if the strength of the second pilot signal is not larger than the second threshold value.

As explained above with respect to claim 2, Applicant respectfully submits that neither Gilhousen nor Butler, nor any combination thereof would include such a feature.

Accordingly, for at least these additional reasons, Applicant respectfully submits that claim 19 is patentable over the prior art.

Claim 20

Among other things, in the system of claim 20 the first and second page indicators are optimized using a computer simulation.

As explained above with respect to claim 4, Applicant respectfully submits that neither Gilhousen nor Butler, nor any combination thereof would include such a feature.

Accordingly, for at least these additional reasons, Applicant respectfully submits that claim 20 is patentable over the cited art.

Claim 22

Among other things, the system of claim 22 includes processor means for determining if the strength of a first pilot signal is smaller than a first threshold value, processor means for determining if the strength of the first pilot signal is larger than a second threshold value, processor means for determining if the strength of a second pilot signal is smaller than the first threshold value, and processor means for

determining if the strength of the second pilot signal is larger than the second threshold value, where the first and second pilot signals reside in the pilot channel and are associated with the first and second page indicators, respectively, and where the first threshold value is larger than the second threshold value.

For similar reasons to those set forth above with respect to claim 1, Applicant respectfully traverses the proposed combination of Gilhousen and Butler and respectfully submits that no combination of Gilhousen and Butler could produce a system including such a combination of features. Again, Applicant specifically traverses the proposed combination of Gilhousen and Butler.

Also among other things, the system of claim 22 includes processor means for decoding the subsequent paging channel slot, if the strength of the first pilot signal is smaller than the first threshold value, and if the strength of the second pilot signal is not larger than the second threshold value.

As explained above with respect to claim 2, Applicant respectfully submits that neither Gilhousen nor Butler, nor any combination thereof would include such a feature.

Accordingly, for at least these reasons, Applicant respectfully submits that claim 22 is patentable over the prior art.

Claims 23-25

Claims 23-25 depend from claim 22 and are deemed patentable for at least the reasons set forth above with respect to claim 22 (including specifically the traversal of the proposed combination of Gilhousen and Butler), and for the following additional reasons.

Claim 24

Among other things, the system of claim 24 includes processor means for decoding the subsequent paging channel slot, if the strength of the first pilot signal is smaller than the first threshold value, and if the strength of the second pilot signal is not larger than the second threshold value.

As explained above with respect to claim 2, Applicant respectfully submits that neither Gilhousen nor Butler, nor any combination thereof would include such a

feature.

Accordingly, for at least these additional reasons, Applicant respectfully submits that claim 24 is patentable over the prior art.

CONCLUSION

In view of the foregoing explanations, Applicant respectfully requests that the Examiner reconsider and reexamine the present application, allow claims 1-25 and pass the application to issue. In the event that there are any outstanding matters remaining in the present application, the Examiner is invited to contact Kenneth D. Springer (Reg. No. 39,843) at (571) 283.0720 to discuss these matters.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment (except for the issue fee) to Deposit Account No. 50-0238 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17, particularly extension of time fees.

Respectfully submitted,

VOLENTINE FRANCOS & WHITT, P.L.L.C.

Date: 21 June 2005

By: _____
Kenneth D. Springer
Registration No. 39,843

VOLENTINE FRANCOS & WHITT, P.L.L.C.
One Freedom Square
11951 Freedom Drive, Suite 1260
Reston, Virginia 20190
Telephone No.: (571) 283.0724
Facsimile No.: (571) 283.0740